REMARKS

This Response is in reply to the Office Action mailed on February 17, 2006. Claims 1-8, 10, and 12 are pending and claims 1, 5, and 10 have been amended herein. No new matter has been added. Entry and consideration of the amendments and following remarks is respectfully requested.

REJECTIONS UNDER 35 U.S.C. § 103(a)

Claims 1-5, 7, 10, and 12 stand rejected as obvious over Brinzer (U.S. patent no. 6,031,453) in view of Engdahl (U.S. patent no. 6,282,455). Claim 6 stands rejected as obvious over Brinzer and Engdahl in view of Itoh (EP 0716364). The rejections are respectfully traversed.

Brinzer discloses a method for monitoring an automation system which is controlling a technical process. In the automation system, there are control cabinets where the circuit elements are attached. Brinzer provides a solution for locating a fault in the automation system, i.e. in the circuit elements in the control cabinet. According to Brinzer, the prior art systems have displays that graphically display the process to be monitored and when a fault in circuit elements occurs, the fault is displayed by showing it's consequences to the process and not the broken component itself nor the location of the fault or the rack or the position of the circuit element in the rack (col. 1, lines 17-37). As a solution to this problem, Brinzer provides a fault message to appear on the display (col. 3, lines 62-67). By clicking the fault message the user calls up the fault display function which is a display of the control cabinet in which the fault has occurred (col. 4, lines 8-13). The display shows the geometric structure of the control cabinet, which structure is determined from the planning and design data (col. 4 lines 14-21). The module

with the fault can be seen in the retrieved structure of a control cabinet by color marking (col. 4 lines 24-35). Thus, Brinzer only suggests to use the system for locating a fault.

In contradistinction, the claimed invention includes a terminal for displaying a *process graphic diagram* which illustrates the process to be controlled. The process graphic diagram consists of 2-dimensional symbols *representing* the process elements, for example, pumps, pipes etc. and information about the status of the process. The operator can control the process by monitoring the process graphic diagram. By using an input device to select the process elements in the process graphic diagram, the operator can call graphic images of the process elements on the display. The graphic image is a 3-dimensional virtual image. A virtual image is not an actual image of the process element, but an artificially produced image formed by software that corresponds to a real image. It also shows a model of the real field environment portion of the process element. Thus, the virtual image is a representation of the real field environment portion and it is possible for the operator to see basically everywhere in the created virtual environment. The operator can also "virtually wander" in the process facilities. This helps the operator to get familiar with the process and learn the actual locations of the process elements. This is also very useful for maintenance personnel as the locations of the process elements needing attention can be checked virtually before entering the plant area.

The term "virtual" may be defined as follows: "not physically existing as such but made by software to appear to do so" (The New Oxford Dictionary, 1998). Virtual image is thus not a video surveillance image provided by a TV-camera. Consequently, this system is not intended to be used to find actual fault in the process elements. For example, if a valve is broken and it is causing water to spray around, the water cannot be seen in the virtual image.

Another advantage of the present invention over the monitoring system of Binzer is that the virtual image in the present invention can be adjusted so that the entire system can be viewed at the same time. For example, if two tanks are connected by a pipe that is 300 meters long the entire system can appear in the same process graphic diagram. The pipe on the display of the process graphic diagram is represented by an image that is only 20 millimeters long. When the same tanks and pipe are being brought up as a graphic image, the operator notices that the pipe is 300 meters long.

Brinzer does not teach a graphic image which is a virtual image of the selected part of the process graphic diagram, as claimed in the present invention. Instead, Brinzer teaches only a geometric 2-dimensional structure of a control cabinet. Fig. 5 of Brinzer shows only a geometric structure of a control cabinet (col. 2, line 34; col. 4, lines 20-21).

Engdahl teaches a method for designing a 3-dimensional virtual environment of a control system (col. 2, lines 9-11). Engdahl also discloses allowing the user to interact with the virtual environment by moving objects around the virtual environment (col. 3, lines 11-14).

In contrast to Engdahl, the claimed invention is an accurate 3-dimensional model of the environment. Furthermore, Engdahl does not disclose showing 2-dimensional process graphic diagrams, as recited in independent claims 1 and 10. Engdahl certainly does not disclose showing a 3-dimensional graphic image of a process element *as a result of* selecting a 2-dimensional process graphic of the process element with an input device.

In view of the above, neither Brinzer nor Engdahl, either alone or in combination, teach the invention recited in independent claims 1 and 10. Accordingly, it is respectfully submitted that claims 1 and 10 are allowable and that the rejection should be withdrawn. Furthermore, for at least the reason of their direct or indirect dependence from claims 1 or 10, it is respectfully submitted that claims 2-8 and 12 are also patentable.

Itoh does not teach the features, recited above, that Binzer and Engdahl fail to teach. Accordingly, even if one were to combine Itoh with Binzer and Engdahl the result would not be the invention of claim 6.

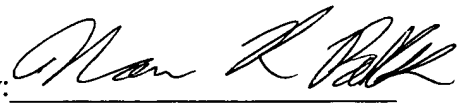
CONCLUSION

In view of the amendments to claims 1, 5, and 10 made herein and the arguments presented above, it is submitted that the Examiner's rejections have been overcome and should be withdrawn. The application should now be in condition for allowance.

Should any changes to the claims and/or specification be deemed necessary to place the application in condition for allowance, the Examiner is respectfully requested to contact the undersigned to discuss the same.

This Response is being filed with a petition for a one-month extension of time and the required fee. In the event that any other extensions and/or fees are required for the entry of this Amendment, the Patent and Trademark Office is specifically authorized to charge such fee to Deposit Account No. 23-2820 in the name of Wolf, Block, Schorr & Solis-Cohen LLP. An early and favorable action on the merits is earnestly solicited.

Respectfully submitted,
WOLF, BLOCK, SCHORR & SOLIS-COHEN LLP.

By: 
Noam R. Pollack
Reg. No. 56,829

Wolf, Block, Schorr & Solis-Cohen LLP
250 Park Avenue, 10th Floor
New York, New York 10177
(212) 986-1116